

Did the pandemic change the image of Spanish nurses? Nurse identity and voice as sources of information

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ABSTRACT

Introduction: The media plays a crucial role in shaping nurses' social image. Disseminating a nursing image inconsistent with their professional identity has adverse consequences for nurses, the healthcare system, and society.

Objective: To compare nurses' image and role as information sources in 2019 and 2020, the professional identity framework agreed upon by ISPIN will be used for analysis. To study whether the image of nurses in the media during the COVID-19 pandemic was more comprehensive and whether they were given a more significant role as information sources.

Material and Method: Quantitative analysis using an instrument that evaluates the coherence between the published image and the professional nurse identity defined by ISPIN in 468 news articles published in *El País* and *El Mundo* in 2019 and 2020, which included the words nurse(s) or nursing.

Results: The media presence of nurses increased in 2020. The main topics in which they were mentioned during the two years were related to problematic issues within the profession. The number of reports describing their daily work

increased in 2020. The most widely publicized role remained caregiving, but their visibility as managers grew during the pandemic. Stereotypes used to represent them decreased, and the presence of male nurses was more significant.

Conclusion: Although the presence of nurses and their associations as information sources increased, they were not the primary sources in most of the news articles.

Keywords: nursing; nurse image; nurse identity; information sources; press.

RESUMEN

¿Cambió la pandemia la imagen de las enfermeras españolas? Identidad enfermera y voz como fuentes informativas

Introducción: Los medios de comunicación son claves en la configuración de la imagen social de las enfermeras. La difusión de una imagen de enfermería incoherente con su identidad profesional tiene consecuencias adversas para las enfermeras, para el conjunto del sistema sanitario y para la sociedad.

Objetivo: Comparar la imagen de las enfermeras y su papel como fuentes informativas en 2019-2020 tomando como marco para el análisis la identidad profesional consensuada por ISPIN. Estudiar si durante pandemia por COVID-19 la imagen de las enfermeras en los medios fue más completa y si se les dio un mayor protagonismo como fuentes informativas.

Material y Método: Análisis cuantitativo mediante instrumento que evalúa la coherencia entre la imagen publicada y la identidad profesional enfermera definida por ISPIN en las 468 noticias publicadas en El País y El Mundo en 2019-2020, que incluían la palabra enfermera/s, enfermeros/s o enfermería.

Resultados: La presencia mediática de las enfermeras aumentó en 2020. Las temáticas principales en las que se las mencionó durante los dos años estuvieron relacionadas con cuestiones problemáticas del ejercicio de la profesión. El número de informaciones publicadas en las que se describe su trabajo diario aumentó en 2020. El rol más difundido fue el asistencial, pero la visibilidad de su función como gestoras creció durante la pandemia. Los estereotipos para representarlas se redujeron y la presencia de hombres enfermeros fue mayor.

Conclusión: Aunque se incrementó la presencia de las enfermeras y de sus asociaciones como fuentes informativas, no fueron fuentes principales en la mayoría de las noticias.

Palabras clave: enfermería; imagen enfermera; identidad enfermera; fuentes informativas; prensa.

INTRODUCTION

The image of nurses in the media is key to the development of the profession. As in other professional fields, the way nursing work is portrayed not only affects social recognition¹ or the personal satisfaction of each nurse, but also the profession as a whole². Issues such as public investment in health systems, public and patient trust³, the quality of the services they provide^{4,5}, nurses' own perception of their profession⁶, their intention to leave their jobs, or the demand from students who wish to study nursing⁷ depend, to a large extent, on the image that public opinion builds through the media^{8,9}.

Studies analyzing the image of nursing disseminated through the press, radio, television, and social networks have increased over the years⁹. Most share a common finding: the published image of nurses does not correspond to the reality of their work nor to the evolution this discipline has undergone in recent decades. As the literature reviews on this topic conclude, there is a lack of media visibility of nurses and, in many cases, their image is distorted, simplified, stereotyped, and does not reflect the diversity, value, and richness of their work⁸⁻¹¹.

The most recent review concluded that in 40% of cases this image was negative and, in a further 20%, the negative traits outweighed the positive ones⁹.

For all these reasons, it is relevant to continue analyzing in detail and from different angles the problems that affect the image of nursing and its representation.

The more detailed and comprehensive the analysis, the more it will help nurses and the organizations that represent them to understand how to communicate their identity strategically^{12,14}. At the same time, it will help journalists, advertisers, and communicators to reflect on their practices, understanding what to avoid and which ingrained habits to challenge so that the image they disseminate is coherent with—or at least approximates—the identity of the nursing discipline in the twenty-first century^{15,16}. It should be added that, despite numerous studies, professional nursing identity¹⁷ is not yet globally agreed upon, making it essential that such research starts from a clear, prior definition that allows comparison with the published image^{11,13}.

Researchers who have examined this field have developed coding schemes to apply to specific samples of news, typically in a single type of medium (mainly print press) and over a defined period⁹. Before the pandemic, only two quantitative studies were identified that were replicated in two different time samples in order to compare whether the image had improved or worsened^{18,19}.

On the other hand, insufficient attention has yet been paid to the role of nurses as sources in health news. Sources are people, institutions, and organizations of all kinds that provide the information needed by the media to produce news. They are particularly relevant in specialized journalism, given that journalists rely on the specific knowledge and credibility of professionals, as well as on their ability to contrast and verify information^{20,21}. According to the *Observatorio de la Comunicación Científica* (2008), "the distribution in the use of sources is mainly disputed between those from the scientific-health sector and those from the political-administrative sector". However, the weight and role of different specific actors in the health sector, such as nurses in this case, still remain to be investigated²².

For all the above reasons, this article aims to analyze and compare two samples of news items published by the two most important Spanish national newspapers, in both print and online versions, over two consecutive years: 2019 and 2020. The objective is to observe which elements persist and which aspects change regarding the image of nurses conveyed in 2019 (a period of "normal" news conditions) and during the 2020 health crisis, so that their role as information sources can be evaluated. Some recently published studies confirm that the pandemic has led society to pay more attention to nurses, partly due to the increased media visibility of this profession, which has been on the front line of defense against the virus worldwide²³⁻²⁵. However, no study has yet shown in a comprehensive way what that image is like, whether it

corresponds to the image nurses and their associations have of their own work, and whether nurses have been heard as information sources.

Indeed, the scientific literature shows that, in times of pandemic, usual patterns of news presentation change and health-related information reaches its highest prominence due to the nature of the pathogen, with health professionals and biomedical experts taking on a particularly central role as information sources and authorities²⁶⁻²⁷. Considering that during the COVID-19 crisis media attention focused on health services and their main actors²⁸, this has opened an opportunity to conduct a content analysis of press coverage of nurses before and during COVID-19, not only because the volume of publications increased²⁷ but also because of the greater impact that such information may have had on public opinion^{23,29,30}.

ENDPOINTS

The specific endpoints of this study are to analyze whether the pandemic in Spain has contributed to increasing the visibility of nurses in the print press; reflecting nurses' identifying features, their work in the health system, and their professional competence; and strengthening their role as information sources on health issues.

Throughout the study, the term “nurses” will be used to refer collectively to female and male nurses, in line with the recommendation made by professional associations in the sector³¹.

MATERIAL AND METHODS

We conducted an exploratory, analytical, cross-sectional quantitative study. It follows the tradition of social sciences research on the image of nursing, applying in this case a quantitative content analysis tool (instrument) to a sample of news items⁹.

Sample selection

The analysis focused on the two leading Spanish national general-interest newspapers, *El País* and *El Mundo* (2019–2020), whose print and online versions are well established³². In this way, the study follows the line of research that analyzes the content of news about nurses in reference print media in countries such as Italy³³, Brazil^{24,34}, or China³⁵, contributing to the existing scientific discussion.

Unlike other studies that have searched for an explicit mention anywhere in the text or that have analyzed the presence of nurses in health news^{8,9,11}, this study opted to search for news in which nurses played a prominent role, that is, where they were—or could reasonably be expected to be—the main protagonists of the story, a criterion also used in previous research^{33,36}.

Therefore, following journalistic relevance criteria, which establish that the “who”, together with the other 5 Ws (what, when, where, why), must be present in the first level of reading of the news³⁷, we selected items in which the nurse or nursing appeared in the headline or subheadline.

The search for news items was carried out using My News. Its advanced search function was used to retrieve items that contained in the headline or subheadline any of the following terms: *enfermera*, *enfermero*, *enfermeras*, *enfermeros*, *enfermería*, using the Boolean operator OR. Eight searches were performed in four outlets—*El Mundo*, *elmundo.es*, *El País*, *elpais.com* (which also retrieves content from *El País Semanal*)—for 2 time intervals in each: from 1/1/2019 to 12/31/2019, and from 1/1/2020 to 12/31/2020.

News items were excluded when the term *enfermería* referred to the physical space for treatment or care, and when the word was part of the compound term *auxiliar de enfermería* (“nursing assistant”), as this is a different profession in Spain.

Following these criteria, a final corpus of 468 news items was obtained. **figure 1** shows the complete flowchart of the collection process.

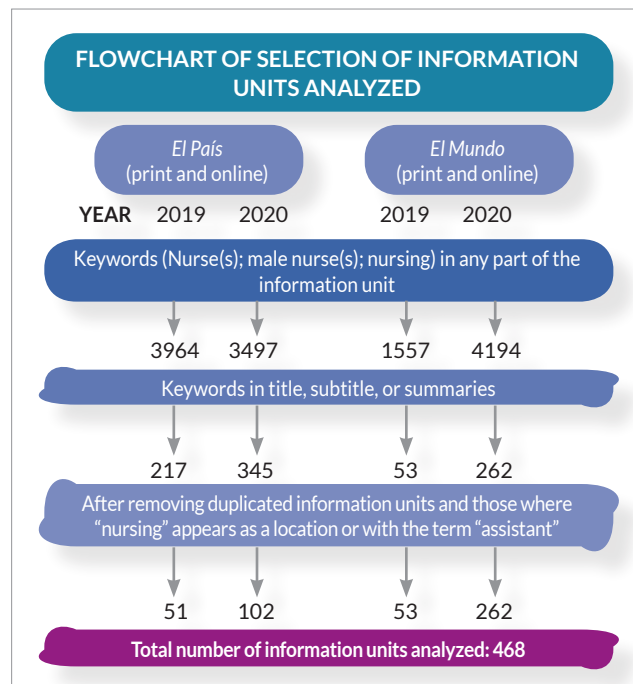


Figure 1. Collection Flowchart.

Analysis variables

Quantitative analysis variables from a previously designed instrument were applied to the units in the sample. Through 33 variables, the instrument makes it possible to assess the coherence between the definition of professional nursing identity provided by the International Society for Professional Identity in Nursing (ISPIN) and the image of the profession published in print and online media.

Table 1. Reliability coefficients among coders for formal variables.

Variable	Average % Agreement	Scott's Pi	Cohen's Kappa	Krippendorff's Alpha
Day of the week	100%	1	1	1
Day of the month	100%	1	1	1
Month	100%	1	1	1
Year	100%	1	1	1
Medium	100%	1	1	1
Front-page appearance	100%	1	1	1
Section of the medium	98%	0.973	0.973	0.974
Journalistic genre	100%	1	1	1
Graphic accompaniment	94.1%	0.875	0.875	0.876
News size	88.2%	0.804	0.804	0.805
Page type	100%	1	1	1
Duplication status (if repeated)	98%	0.962	0.962	0.963
Note signature (authorship)	94.1%	0.862	0.862	0.863

The first group of variables captures temporal aspects (day of the week, day of the month, month, and year of publication) and journalistic characteristics of the items (newspaper, section, appearance on the front page, genre, graphic accompaniment, size, even or odd page, publication online and/or in print, and authorship). The next group of variables explores, on the one hand, the domain of professional behavior (main topic of the item, main activity performed by the nurse, nurse's workplace, type of care or service provided); the knowledge domain (the care/service impacts on..., nurse's education level, nurse's specialty); the leadership domain (nurse as first, second or third information source; whether nurses are direct information sources; how nurses are referenced—anonously, by first name, by surname, etc.—and whether nurses speak with an individual or collective voice); and the values and ethics domain (nursing stereotypes and negligence). In parallel, another group of contextual variables was collected: gender of the first nurse mentioned, whether the COVID-19 pandemic is mentioned, whether COVID-19 is framed as a war, and the origin (work setting) of the first nurse mentioned, to assess whether these factors may have influenced the image conveyed.

Coding was carried out in two phases. The first phase consisted of coding 13 formal variables in 50 news items. This first phase was coded independently by two researchers, achieving high intercoder reliability (ICR). This indicator was calculated by assessing the percentage agreement between coders and by computing the most widely used reliability

coefficients (Scott's Pi, Cohen's Kappa, and Krippendorff's Alpha) (table 1).

The 2nd phase consisted of coding the remaining 19 content variables in a subsample of 31 of the 50 news items coded in the first phase. In this second phase, percentage agreement (Fleiss' Kappa, Cohen's Kappa, and Krippendorff's Alpha) was also calculated among the five researchers who coded the items (table 2).

The average agreement percentage ranged between 70% and 100%, achieving high intercoder reliability (ICR): agreement among the five coders ranged from 0.601 to 1 in Fleiss' Kappa (Krippendorff's Alpha=0.604 to 1, respectively), which, according to Altman's 1991 interpretation of Fleiss' Kappa, is classified as good to very good³⁸. In this regard, and considering that the coding team is interdisciplinary—coming from nursing and communication—the variable with the lowest agreement among coders was “care or health care assistance provided by nursing staff”, with 70.32%. The next variable reached 82% agreement, already classified as very good in the abovementioned interpretation³⁸.

After achieving good reliability indices, the five researchers applied the analysis instrument to the full set of 468 news items.

A descriptive analysis of the study variables was conducted using frequencies and proportions. Comparison of proportions by year was carried out using Pearson's Chi-square test. To calculate the probability that the first information source was a nursing professional, a logistic regression model was built with the variable “nurse/representative of a union, collective, or nursing association” as the dependent variable, and the following as independent variables: year (2019 vs. 2020); medium (print vs. online); service provided by the information source (patient/user/family, health system/organizational context, several of these, the nurse performs no health-related activity, nursing students); gender of the first source (woman, man, undefined); and workplace of the first source (hospital, primary care/schools/vaccination sites, nursing colleges/associations/unions, workplace not mentioned). Statistical analyses were performed using Stata/SE 15.1. Statistical significance was set at $p < 0.05$ (two-tailed).

RESULTS

Visibility of nursing

When analyzing the information that defines temporal aspects, we can see that of 468 texts published in the two Spanish media outlets, 364 (78%) correspond to the year

Tabla 2. Reliability Coefficients Among Coders for Content Variables.

Variable	Average % Agreement	Fleiss' Kappa	Cohen's Kappa	Alpha de Krippendorff
First search term mentioned	100%	1	1	1
Mention of COVID-19 or the pandemic	100%	1	1	1
Stereotype associated with the accompanying image	98.065%	0.947	0.947	0.948
Mention of the specialty of the first nursing source cited	98.065%	0.953	0.953	0.953
Manner of referring to COVID-19 or the pandemic	94.839%	0.917	0.917	0.918
Primary activity of the nursing personnel	94.194%	0.918	0.918	0.919
Presence of a direct quote from nursing personnel	94.194%	0.884	0.884	0.885
Gender of the first nursing source cited	94.194%	0.913	0.912	0.913
Third information source present	92.903%	0.878	0.879	0.879
Mention of the training of the first nursing source cited	92.903%	0.864	0.863	0.865
Workplace where the nursing personnel practice	92.258%	0.907	0.907	0.908
Main theme	91.613%	0.897	0.897	0.897
On whose behalf the first nursing source speaks	91.613%	0.862	0.862	0.863
Mention of geographic location	88.387%	0.84	0.84	0.841
How the first nursing source is referenced	87.097%	0.83	0.83	0.831
Content of the accompanying image	85.806%	0.815	0.816	0.817
First information source present	85.806%	0.803	0.803	0.804
Second information source present	83.871%	0.806	0.808	0.807
Type of care provided by nursing personnel	82.581%	0.773	0.774	0.775
Care or health care assistance provided by nursing personnel	70.323%	0.601	0.602	0.604

2020. During 2020, in the midst of the COVID-19 pandemic, there was a concentration of publications in March (12%), April (18%), and November (12%), critical moments in which media coverage of nurses' work reached its peak (**table 3**).

Regarding journalistic aspects, *El Mundo* stands out, with 67% (n=315) of the items. Sixty-five percent of all texts were published on the digital platforms *elmundo.es* and *elpais.com* (**table 3**), and 78% (n=365) of the items were not duplicated between print and online editions. In addition, the section with the greatest coverage was the regional section, with 35% (n=166). Of all publications, 63% (n=295) were signed by a journalist, which indicates the relevance and credibility of the news content. However, only 3% (n=15) of the items

appeared in weekend supplements, suggesting very little in-depth coverage of nurses in the press (**table 3**). This is also supported by the fact that there were only 57 (12%) full-page news items in the print editions. The predominance of even-numbered pages in print (21%, n=99) indicates that the topic did not open a section and was not the main subject in the outlet, since left-hand pages (even pages) in a print newspaper generally contain already-known information, whereas right-hand pages (odd pages) present new information³⁹.

With respect to the genre of the items, 61% (n=288) were news reports and 15% (n=71) were features or in-depth reports (**table 3**). As for front-page presence in print editions, only 0.4% (n=2) appeared on the front page. In 72%

(n=338) of the items, the visual accompaniment consisted of photographs; of these, only in 68 items (14%) were nurses the protagonists of the image, shown performing their work, while a slightly higher percentage, 15% (n=72), portrayed them in their private life. In addition, in 8.2% (n=38) of the items the photographs of nurses illustrating the news were anonymous stock images.

When analyzing information about the SARS-CoV-2 pandemic during 2020, of the 364 articles published that year, the word

“COVID” appeared in 312 (67%). In coverage of these articles, COVID was discussed in non-warlike terms in 50% (n=236), without associating it with aggressive metaphors such as struggle, combat, or war.

Of note, there was a significant increase in the number of news items during March and April 2020 (p<0.000) compared with the previous year. A significant association was also observed between month of publication in 2019 and 2020 and the level of coverage of nursing-related news (table 4).

Table 3. Articles related to nursing by month, newspaper, section, genre, and type of publication by year.

MONTH OF PUBLICATION	Year 2019		Year 2020	
	n	%	n	%
	January	11	10.58	5
February	8	7.69	9	2.47
March	9	8.65	44	12.09
April	3	2.88	67	18.41
May	14	13.46	32	8.79
June	10	9.62	18	4.95
July	11	10.58	25	6.87
August	3	2.88	16	4.40
September	3	2.88	31	8.52
October	12	11.54	32	8.79
November	10.58	10.58	44	12.09
December	9	8.65	41	11.26

NEWS OUTLET	Year 2019		Year 2020		Total	
	n	%	n	%	n	%
	<i>El País</i>	21	20.19	48	13.19	69
<i>El País.com</i>	30	28.85	54	14.84	84	17.95
<i>El Mundo</i>	9	8.65	86	23.63	95	20.30
<i>El Mundo.es</i>	44	42.31	176	48.35	220	47.01
Total	104	100	364	100	468	100

PUBLICATION SECTION	Año 2019		Año 2020		Total	
	n	%	n	%	n	%
	Health	—	—	63	17.31	63
National	7	6.73	21	5.77	28	5.98
Economy and Labor	2	1.92	1	0.27	3	0.64
Opinion	2	1.92	14	3.85	16	3.42
Regional	45	43.27	121	33.24	166	35.47
International / World	9	8.65	13	3.57	22	4.70
Weekend Supplement	2	1.92	13	3.57	15	3.21
Society	23	22.12	32	8.79	55	11.75
Culture	1	0.96	2	0.55	3	0.64
Technology	—	—	1	0.27	1	0.21
Sports	1	0.96	2	0.55	3	0.64
TV / Screens	1	0.96	23	6.32	24	5.13
People / Social Life	1	0.96	5	1.37	6	1.28
Events	1	0.96	—	—	1	0.21
Specialized Supplements	8	7.69	33	9.07	41	8.76
Other	1	0.96	0	—	1	0.21
Special COVID Section	—	—	20	5.49	20	4.27

PUBLICATION GENRE	n	%
	News	288
Editorial	2	0.43
Column or Analysis	11	2.35
Letter to the Editor	6	1.28
Feature or Chronicle	71	15.17
Interview	13	2.78
Profile	3	0.64
Expert Article	35	7.48
Video	24	5.13
Side Story / Breakout Box	10	2.14
Photo Feature / Photo News	4	0.85
Review / Critique	1	0.21

A statistically significant relationship was confirmed between medium of publication (print or online) in both years (p<0.000), with more digital publications in 2020. The COVID-19 pandemic and associated restrictions may have accelerated this transition, as people increasingly turned to online media during this period (table 4).

The use of non-warlike terms to talk about COVID in 2020 was also statistically significant (p<0.000).

Table 4. Bivariate analysis for months and publication media, compared by year.

	Proportion (n)		Total Proportion (n)	p-value
	2019	2020		
Months				*0.00
January/February	18.27 (19)	3.85 (14)	17.52 (33)	
March/April	11.54 (12)	30.49 (111)	26.28 (123)	
May/June	23.03 (24)	13.74 (50)	15.81 (74)	
July/August	13.46 (14)	11.26 (41)	11.75 (55)	
September/October	14.42 (15)	17.31 (63)	16.67 (78)	
November/December	19.23 (20)	23.35 (85)	22.44 (105)	
Publication Medium				*0.00
<i>El País</i>	20.19 (21)	13.19 (48)	14.74 (69)	
<i>El País.com</i>	28.85 (30)	14.84 (54)	17.95 (84)	
<i>El Mundo</i>	9.65 (9)	23.63 (86)	20.30 (95)	
<i>El Mundo.es</i>	42.31 (44)	48.35 (176)	47.01 (220)	

Bivariate analysis for complete variables. Pearson's Chi-square test. $p < 0.05$.

Who nurses are, their work in the health system, and their professional competence

The most frequently used word in the articles was “enfermera(s)” (“nurse(s)” in the feminine), appearing in 54% ($n=254$). It is noteworthy that “enfermero(s)” (masculine “nurse(s)”) appeared in 33% ($n=155$), with this percentage being higher in 2019—42% ($n=43$), compared with 36% ($n=38$) for “enfermera(s)”. In 2020, “enfermera(s)” appeared first in a greater proportion of news items: 59.34% ($n=216$), compared with 30.69% ($n=112$) in 2019, which mentioned their male counterparts (table 5). However, when analyzing the gender of the first nurse source cited, the percentage of men was 15% ($n=16$) in 2019 and 19% ($n=69$) in 2020, representing a slight, non-significant increase.

With respect to nurses' education, it stands out that in 47% of the sample (49% in 2019 and 46% in 2020) their education level was not specified, and that in 2020 only 3% ($n=12$) were explicitly described as holding a bachelor's degree in Nursing, without mention of any specialty they might have.

Table 5. Bivariate analysis for first word and comparison by year.

	Proportion (n)		Total Proporción (n)	p-value
	2019	2020		
First word				*0.00
Nurse(s)	36.54 (38)	59.34 (216)	54.27 (254)	
Male nurse(s)	41.35 (43)	30.77 (112)	33.12 (155)	
Nursing	22.12 (23)	9.89 (36)	12.61 (59)	

Bivariate analysis for complete variables. Pearson's Chi-square test. $p < 0.05$.

Among the main topics of the news items, 30% ($n=142$) dealt with nursing working conditions related to staff shortages, salary demands, lack of personal protective equipment (PPE), and nurses' deaths due to COVID-19 (42% in 2019 and 26% in 2020). It is important to highlight the scarcity of news focusing on everyday nursing practice: 8% in 2019 and 14% in 2020. Despite the increase in 2020, the data show that the media devoted more coverage to problematic issues arising from the context in which the profession is practiced than to the outcomes achieved through nurses' day-to-day work on the front line of health care. Care-related competence, with 37% ($n=175$) of items—distributed evenly across both years (36% in 2019 and 38% in 2020)—was the main work activity attributed to nurses. Management competence ranked second, with 18% ($n=83$), almost doubling in 2020 (19%) compared with 2019 (10%). Teaching activity was mentioned in only 1% ($n=5$) of items and research in 0.9%, with no change between years.

Of note, in 34% ($n=162$) of the articles the workplace of nurses was not mentioned. When it was mentioned, the hospital was the most common setting, representing 32% ($n=151$). This result is related to the most widely known nursing role, which is direct clinical care. It is also interesting that only 29% ($n=136$) of the items indicated that nurses' work was directed at patients or users in general, while in 71% ($n=333$) the type of care provided was not specified.

In 68% ($n=318$) of the items, no stereotype was identified, with a very similar distribution across both years (63% in 2019 and 69% in 2020), which is a highly noteworthy finding (table 6), given that, according to previous studies, nursing has routinely been associated with various stereotypes. It is striking that in only 5% ($n=23$) of articles (1% in 2019 and 6% in 2020) nurses were portrayed as heroes and/or martyrs, despite the COVID-19 health crisis being a context in which there was significant social recognition of nurses' work and sacrifice.

On the other hand, analysis of the articles showed a statistically significant association between the first word mentioned (“enfermera”, “enfermero”, “enfermeras”, “enfermeros”, “enfermería”) ($p < 0.000$) and the year of publication, indicating that these terms were mentioned more often in 2020. No statistically significant association was found between the gender of the first nurse source and year of publication. Nor was there a significant correlation between year of publication and nurses' workplace, type of care provided, or level of professional training.

Table 6. Bivariate analysis for stereotype and comparison by year.

	Proportion (n)		Total Proportion (n)	p
	2019	2020		
Stereotype Presence				*0.00
Saint/nun/sexualized/assistant/servility	7.69 (8)	12.36 (45)	11.32 (53)	
No stereotype identified	63.46 (66)	69.23 (252)	67.95 (318)	
Incompetent/unqualified/negligent	17.31 (18)	3.02 (11)	6.20 (29)	
The word "nurse" appears, but no nurse (no subject)	11.54 (12)	15.38 (56)	14.53 (68)	

Bivariate analysis for complete variables. Pearson's Chi-square test. $p < 0.05$.

Role of nursing professionals as information sources on health issues

In 27% of the articles, the first source was a nurse, with a slight, non-significant increase from 24% in 2019 to 28% in 2020. It is noteworthy that, in the subset of items in which nurses were cited as sources, in 42% the first information source was either a nursing professional (27.35%, $n=128$) or a representative of the profession, with 15% ($n=71$) of this proportion corresponding to representatives of unions, collectives, or nursing associations (table 7).

Considering nurses broadly (including associations, nursing colleges, and general directorates of nursing), they appeared as direct information sources in 53% ($n=246$) of the news items. In 38% ($n=179$), the quote was not attributed to an individual nurse, male or female, but rather to collective bodies (colleges, associations, or unions). With regard to the gender of the nurse cited directly or indirectly, 32.48% ($n=152$) were women, 18.16% ($n=85$) were men, and 11.11% ($n=52$) were association representatives whose gender was not specified.

In terms of how the first nurse source was presented or identified, in 35% ($n=163$) they spoke in their own name, and in 20% ($n=93$) they spoke as part of a collective, representing a nursing association.

A multivariable regression model was developed to analyze the association between the first information source and variables such as year, medium of publication (print or digital), gender of the first source, type of service provided by the nurse, and workplace. It was observed that, independently of year, medium, and other factors, compared with the reference service category, the likelihood that the first nurse source would act as a representative of the health system/organizational context (working in the Nursing Council, associations, or political posts) and that this source would be a male nurse was doubled (adjusted OR 2.06 and 2.01, respectively) (table 8).

Table 7. First informative source.

FIRST INFORMATIVE SOURCE		
	n	%
Nurse (female/male)	128	27.35
Physician or immunologist/virologist	26	5.56
Other health care professionals (profession specified)	4	0.85
Health care professionals (unspecified)	4	0.85
Hospital manager/coordinator	8	1.71
Politician or political institution related to health competencies	46	9.83
Representative of nursing union, collective, association, or nursing councils	71	15.17
Representative of union/collective (health-related, not nursing)	5	1.07
Patient or family spokesperson; patient organizations (may include health care workers)	7	1.5
Patient's family member	2	0.43
Professors or academic authorities (schools of nursing)	2	0.43
Source unrelated to nursing or health	86	19.02
Nursing students or student associations	1	0.21
No informative sources mentioned	60	12.82
Citizens, not mentioned as patients	5	1.07
Other: non-university professionals related to health	10	2.14
TOTAL	468	100

DISCUSSION

Health, health systems, and their professionals have not been a priority topic in the media in the twentieth and twenty-first centuries⁴⁰. However, this field has gradually gained prominence, and the COVID-19 pandemic established it as one of the most heavily covered topics in 2020.

Studies published in recent decades have shown that, during health crises, citizens depend to a great extent on information disseminated by major news organizations. The use of a variety of sources emerges as one of the fundamental elements shaping the nature of that information⁴¹. Moreover, the diversity and reliability of the sources selected are key factors that reflect informational pluralism in media environments⁴².

Several studies have analyzed how the image of nurses has been portrayed by the media during the pandemic^{9,24,43-47}. In this context, the present study aimed to determine whether, during the pandemic caused by the SARS-CoV-2 virus, nurses gained greater visibility, whether their identity was better reflected, and whether their role as information sources in the media increased compared with the previous year. The results obtained reveal important patterns in how nursing was reported in the media during the two years studied in Spain, adding knowledge to similar comparative studies conducted in countries such as Korea⁴⁸ or Turkey⁴⁹.

The results of this study confirm that in 2020 there was an increase in digital media publications on nursing-related topics compared with 2019, particularly during the lockdown

and the first surge of the pandemic. These findings are consistent with another study on publications during the COVID-19 pandemic, in which digital media dominated news dissemination compared with print press and other media²⁷. Most of these items were written and signed by journalists, which confirms a clear interest in producing news targeted at a specific audience.

Pandemics are news events that can favor the presence of nurses in the media. Previous studies have examined how nurses were portrayed during the Spanish Flu pandemic⁵⁰, the SARS crisis⁵¹, and the Ebola outbreaks^{52,53}. These studies agreed that, despite the increase in the number of news items in which nurses were mentioned, overall, the image conveyed was inaccurate and inadequate. Analysis of coverage of the Spanish Flu concluded that what was published did not help improve nurses' social image⁵¹. In Ebola coverage, they were presented as heroes caring in contexts described as war-like, or as villains when they were depicted as failing to comply with protocols to prevent infection, or as being rejected by society as possible carriers of the virus⁵²—something also reflected in reports on the SARS pandemic⁵². Although news coverage of SARS showcased nurses' leadership in care delivery, journalists emphasized the barriers they faced in performing their work, their concerns, and the shortage of nurses—all aspects focused on conflictual elements of the profession.

These issues also appeared in COVID-19 coverage according to this study's findings, although to a much lesser extent (42% in 2019 and 26% in 2020). As in other research on the image of nurses during pandemics, this study also concludes that, despite nurses being more visible, the fact that their daily work and contribution to the health system remained relegated to a secondary position means that their identity is still poorly communicated and does not help improve society's understanding of the profession. Furthermore, several findings reinforce this conclusion, such as the low number of feature reports and interviews about nursing in the press, the predominance of short hard news, and scarce interest in in-depth coverage. It is also noteworthy that nurses appeared on the front page only rarely. Photographs were the main visual accompaniment, but nurses seldom occupied a central role in those images and were most often portrayed in private settings or anonymously. A subsequent qualitative content analysis of these images could provide evidence supporting or refuting iconographic studies such as that by Martínez-López, which concluded that images published during the pandemic showed nurses in stereotyped ways, particularly through a hero narrative⁵⁶. It is also confirmed that, unlike what occurred in media from other countries^{45,55}, the Spanish press hardly used war-related terminology to describe the pandemic. Journalists' efforts to employ more neutral

Tabla 8. Model for dependent variable: nurse or representative of nursing union/collective/association.

Variable independiente	OR	IC 95%	p
Year			
2020	1.29	0.76–2.18	0.33
Type of Media			
Online	1.50	0.92–2.45	0.09
Service Performed			
Health system/Organizational context	2.06*	1.03–4.12	0.04
Performs several services	3.14	0.8–12.37	0.06
The nurse performs no activity	0.96	0.55–1.66	0.79
Nursing students	1		
Gender of Source			
Male	2.01*	1.06–3.79	0.03
Other	0.20	0.12–0.33	0.00
Place of Practice			
Primary care/schools/vaccination sites	2.09	0.86–5.07	0.10
Multiple settings/associations/unions	1.72	0.80–3.68	0.15
No workplace mentioned	1.12	0.30–1.26	0.19

Own source. CI, Confidence Interval; Pseudo R², 0.1886; Model chi-square (10)=110.58; *p<0.05.

language, less tied to war or conflict metaphors and aimed at conveying information in a more precise, less negative, and more empathic way may be linked to the #ReframeCovid movement, which began in Spain⁵⁶.

When analyzing whether the articles reviewed provided information about who nurses are, what their work in the health system is like, and what their professional training involves, we can emphasize that in more than half of the documents the first term used was “nurses” (*enfermeras*). According to data published by the Spanish National Statistics Institute (INE), in 2020 there were 323,915 registered nurses in Spain, of whom 51,691 (15.95%) were men and 222,223 (84.04%) were women—percentages similar to those in 2019, when 15.77% were men and 84.23% women (INE). Although the first word used in the articles was “*enfermera(s)*” (feminine “nurse(s)”) in 54% (n=254) of cases, it is noteworthy that “*enfermero(s)*” (masculine “nurse(s)”) appeared in 33% (n=155), with this percentage being higher in 2019—42% (n=43)—compared with 36% (n=38) for *enfermera(s)*. In 2020, nurses were mentioned first in a higher percentage of news items—59.34% (n=216) compared with 30.69% (n=112). These results contrast with those of Martínez-Rodríguez, who identified predominant use of the masculine form in generalist online press during COVID, versus a predominance of the feminine form in specialized press⁴³.

However, when analyzing the gender of the first nurse source cited between 2019 and 2020, it is relevant to note that the percentage of male nurses increased from 15% to 19%. The data presented above show that men in the profession are overrepresented in the news (both in mentions and as sources) in a profession that has historically been and continues to be predominantly female. Without access to journalists’ intentions—which opens a line for future research—this overrepresentation of men could indicate the persistence of a male-biased sexist pattern or, conversely, an attempt to avoid gender stereotypes⁵⁷, in this case favoring men. In any case, it may help make men in nursing more visible, which in turn may encourage more men to choose the profession. Making men’s caregiving work visible in the media could be a useful strategy, especially if combined with existing initiatives in other countries, such as campaigns specifically aimed at recruiting male nurses⁵⁸ or rethinking undergraduate training to include a male-gender perspective⁵⁹. Together, these may help reduce stereotypes associated with men in nursing^{60,61} and encourage new generations of men to train and work as nurses, thereby contributing to tackling the global nursing shortage⁶².

With regard to nurses’ education, it is striking that in almost 50% of the news items their level of education was not specified and that only in a very small percentage was it made explicit that they held a bachelor’s degree, with no mention of additional qualifications such as specialties, master’s degrees, or doctorates. This lack of media visibility of degree-level training and of postgraduate qualifications may partly explain why significant segments of the Spanish population still do not know that nurses must obtain a university degree

to practice³⁰. From a more optimistic perspective, it could also be interpreted that the word “nurse” automatically implies a graduate-level qualification, as happens with “doctor” or “teacher”.

All of this, together with the main work activity attributed to nurses in the articles, shows no differences between the 2 years analyzed. The results confirm that the function with greatest media visibility in both years was direct care, which is mainly performed in hospitals or clinics. Management functions were second, although far behind. Nonetheless, it is worth highlighting that the evidence found in this study allows us to affirm that nursing management gained greater visibility during the pandemic, probably because of the visibility of organizational activities in which nurses’ managerial roles were essential. Finally, teaching and research roles were mentioned, but with very low percentages. These figures are minimal considering the importance of both roles in advancing the discipline and training new generations of professionals⁶³. The results show that, although in other countries such as Brazil the pandemic has given somewhat more visibility to nursing research²⁴, in Spain this remains a pending issue, as former studies have already concluded⁶⁴.

Within the main themes of the news items, nurses’ working conditions stand out: staff shortages, salary claims, lack of PPE, and nurses’ deaths from COVID, as identified in other studies⁶⁵. Although these issues remained a priority during the pandemic, it is notable that, despite the extremely difficult working conditions faced by nurses, such topics actually decreased vs 2019. Coverage of nurses’ day-to-day work almost doubled in 2020, although it remains low, given the wide range of tasks carried out by this professional group during the pandemic. Coverage of managerial work also remained very limited but likewise doubled in 2020.

Regarding nurses’ workplaces, the setting most frequently mentioned by journalists was the hospital, thereby confining their work to the hospital setting and rendering other fields such as primary care invisible, where more than 40,000 nurses work (Spanish National Health System, SNS, 2022). It is also important to highlight that most of the news analyzed did not reflect information on the holistic care provided by nurses, with physical care being most visible. The analysis shows that in less than 30% of the items the care provided by nurses was explicitly directed at patients or users, without journalists making visible that nurses’ work also impacts families, communities, and health systems, among others. This media invisibility of actual nursing care confirms findings from previous studies^{66,67} and underscores the need for proactive communication by nurses to reverse this situation⁶⁸.

Although many studies confirm that the published image of nurses is often represented through multiple stereotypes—such as nun, evil/authoritarian, sexy/silly, doctor’s assistant, and hero, among others^{61,69-72}—the results of this research refute that tendency, since such stereotypes were hardly used in the news analyzed.

Moreover, only a small percentage of articles portrayed nurses as heroes and/or martyrs. These results suggest the hypothesis that the most recent pandemic may have helped blur such stereotyped images, or that the media may be more aware of and resistant to stereotypes. Likewise, the absence of references to heroism may be a consequence of avoiding war-like terminology in this type of discourse.

However, this interpretation is not supported by studies from other countries showing that nurses were in fact portrayed as heroes, a label that can be dangerous in terms of remuneration (as it implies “emotional compensation” instead of fair pay) and risky for their physical and mental health, since a hero is expected to face all risks without protection and without being allowed to appear vulnerable^{46,54,73-75}.

Several studies point to a scarcity of health information sources in the media (especially nurses)^{18,19}, even during the pandemic^{22,45}. However, research conducted in the United States has confirmed that nurses can provide valuable information that enriches health news⁴⁵.

In this study, when analyzing the role of nursing professionals as information sources on health issues, in fewer than 30% of the publications was the first source a nurse. It is confirmed that not even a health crisis is sufficient to change the media's tendency to sideline experts and professionals as sources of health information^{20,21}, and that politicians and non-health care sources continue to predominate, as also happens in other health-related fields⁷⁶ and in other media, including during the pandemic²².

Nursing associations, professional colleges, and general directorates of nursing are cited as direct information sources more frequently, doubling the likelihood of appearing as the first source. These results confirm that nurses in management roles and professional organizations are more likely to be contacted by journalists¹⁴. Although the institution often appears anonymously, in many cases a specific representative is mentioned. These findings confirm increased visibility of the profession thanks to communication actions by professional organizations, a strategy identified in other studies^{14,77,78}. The results highlight the importance of investigating the communication strategies used by these institutions to assess their effectiveness and propose improvements if necessary.

Journalists' lack of knowledge about the nursing profession^{15,16} and about the informational contributions nurses could make to their stories, combined with nurses' limited training in communication skills^{68,79} and the absence in many countries of an ethical, legal, and institutional framework that safely supports nurses' freedom of expression⁸⁰ are the main barriers identified in the literature to nurses' voices being heard in the media.

Studying how these barriers can be removed would open up new lines of research and action that could counteract the adverse consequences of a scarce and poorly aligned

media presence with nurses' professional identity—such as workforce shortages or declining quality of care⁴.

The present research confirms that the pandemic has increased nurses' media visibility and has partly improved coherence between some aspects of their professional identity and their published image, for example by giving greater prominence to their managerial role and daily work. Some studies already confirm that society's image of nurses has improved thanks to the pandemic and that media coverage has contributed positively to this^{23,29,30}. However, as some authors point out, it is crucial that nurses and all institutions representing them continue working to ensure that these gains are not lost^{25,81}.

Of note, this analysis is based on a specific sample of articles from the 2 highest-circulation national newspapers in Spain and does not cover all media reporting on nursing in 2019 and 2020. The study was limited first by the restriction to two years of analysis, which reduced sample size and underlines the importance of extending the time frame in future research. Second, given the topic, it would be relevant to use the same methodology to examine the image of nursing in the press of other countries to determine whether the Spanish experience is replicated elsewhere. Finally, it would be valuable to develop other longitudinal quantitative studies to trace the trajectory of nursing's professional identity, as well as qualitative studies to explore how journalists perceive nurses' experience, meaning, and role as information sources on health issues.

Practical implications

This study provides valuable insights for the health sector and highlights the importance of nurses' media visibility during health crises. Better understanding of their role and appropriate recognition of their competencies can help strengthen the professional image of nurses in society. In terms of nursing research and education, the study suggests the need to develop training programs that include communication and media skills, enabling nurses to be better prepared to interact with the media and to act as competent, credible information sources. It also underscores the importance of promoting research that analyzes how nurses are represented in the media and how this affects public perception.

Nurses' media presence increased in 2020 compared with 2019, and the presence of nurses and their associations as information sources also rose, although there is still a lack of longitudinal, cross-country evidence to analyze this phenomenon more broadly. Although the number of stories showing nurses' day-to-day work has grown, coverage of this topic remains scarce and continues to fail to make visible what nurses actually do (their specific roles, specialties, and workplaces), nor does it consistently position them as primary sources in health news in which they are mentioned. What has improved significantly is the absence of stereotypes in their portrayal and the visibility

of male nurses in the press, even though they remain a minority in the profession. In analyzing this health crisis, it is paradoxical that, despite being one of the pillars of the health system, nurses did not play a more prominent role as information sources. We can see that longstanding problems persist: although visibility in terms of the number of news items has improved, it remains a challenge to reflect who nurses are, what their work in the health system entails, how their professional training develops, and the leadership they exert in care delivery.

This study has identified that the role nurses can play as health information sources is a field that has been little explored to date and may be highly valuable for nursing, journalism, and society as a whole. There is still work to do in conveying that nurses are highly trained and qualified, working not only in hospitals and with individual patients but also in disease prevention and health promotion, research, and teaching, among other functions.

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